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ACCELERATED LEARNING THROUGH MIND MAPPING STRATEGY

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ABSTRAK. Ketika guru menggunakan permainan dan kegiatan, emosi dan musik, relaksasi, visualisasi dan bermain peran, warna dan belajar peta, belajar menjadi menyenangkan dan bebas dari tekanan. Pemetaan belajar dan pemetaan pikiran adalah merupakan ungkapan "Berpikir cemerlang" dan karena itu fungsi pikiran manusia yang alami. Teknik grafis yang sangat kuatlah yang memberikan kunci yang universal untuk membuka potensi otak. Hal tersebut dipromosikan oleh Rose dan Nicholl.

Kata kunci: percepatan pembelajaran, strategi pembelajaran, pemetaan pikiran.

ABSTRACT. "When teachers use games and activities, emotion and music, relaxation, visualization, role play, color and learning maps, learning becomes a joyful, stress – free event. Learning map and mind map is an expression of Radiant Thinking and is, therefore, a natural function of the human mind. It is a powerful graphic technique which provides a universal key to unlocking the potential of the brain". That is what Rose and Nicholl campaigned.

Key words : accelerated learning, learning strategy, mind map

INTRODUCTION

"Most people, however, use only a tiny fraction of their brain's capacity, not because they don't have the intelligence, but because they have never been taught how to access and develop their innate abilities." This statement is a sharp criticism on the opinion of Sir Charles Sherrington, who was considered by many experts to be the grandfather of neurophysiology, saying that: In each human brain there are an estimated one million, million (1.000.000.000.000) brain cells (Buzan 1993: 27).

What a remarkable thing is that each of those neurons can grow up to 20,000 branches called "dendrites" (1997: 25). However, it is not the number of brain cells (neurons) which is crucial but the number of connections that are made between those brain cells (1997: 25). Connections can be created intensively by doing a lot of readings and problem solving every day and night. In this regard Bill Gates, the boss and the Master of Microsoft computer has suggested that we get a good formal education and then keep on learning. Acquire new interests and skills throughout your life." (1997: 5)

Tony Buzan, furthermore, has reiterated "The more tracks and pathways you can create and use, the clearer, faster and more efficient your thinking will

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become." (1993: 27). His statement is supported by Peter Kouzmich Anokhin of Moscow University, saying:

"We can show that each of the ten billion neurons in the human brain has a possibility of connections of one with twenty – eight noughts after it! If a single neuron has this quality of potential, we can hardly imagine what the whole brain can do. What it means is that the total number of possible combination permutations in the brain, if written out, would be (1) followed by 10.5 million kilometers of noughts!" (1993: 31). How remarkable!

Considering this, it is not right for one to say that he cannot do something. What to say, however, should be: I have yet to develop that skill as "No human yet exists who can use all the potential of his brain. This is why we don't accept any pessimistic estimates of the limits of the human brain. It is unlimited." (1997: 31).

Following is five brain cells demonstrating part of the 'neuronal embraces' throughout the brain as shown by Tony Buzan (1993: 31). Judging from the unique brain cells, it is prudent to develop learning strategies, especially those of language learning following the model of the direction from which the dendrites spread out, forming unlimited networks.

THE STRUCTURE OF THE BRAIN AND THE MIND MAPPING STRATEGY

The Structure of the Brain

The role of the brain competence is very remarkable as it is illustrated by Collin Rose and Malcolm J. Nicholl (1977: 26) in their book: Accelerated Learning, saying: "An appreciation of inner space and the way in which the brain works in fundamental to understanding the learning process".

Based on Dr. Paul MacLeans (in Rose and Nicholl) three brains in one analysis, however, learning process can be boosted successfully so long as the limbic system plays – greater role in language acquisition. Considering the function made by the Hypothalamus and Amygdala, the major parts of the limbic structure, Rose and Nicholl describe that the limbic system is your emotional; controller, besides being important part of your long term memory.

It is also explained further that it is significant that the same part of one's brain that controls emotion and health, equally emotion and memory. When teaching involves strong emotions, it is usually very well remembered. This statement implies that enjoyment, role playing, collaboration and games are important elements in learning because they involve positive emotions.

When the brain is in a state of positive emotional arousal, researchers note that opiate like "pleasure chemical" called endorphins are released. This, in turn, triggers am increased flow of powerful neurotransmitter called acetylcholine. This is important because neurotransmitters are the lubricants that allow connection to be made between brain cells. In other words, 'the brain enjoying itself is functioning more efficiently. So, there is a scientific basis for using art, drama, color, emotion, social learning and even games as educational tool." (1997:25)

Your brain has various names, such as: "a sleeping giant", "an enchanted loom", "the most complex piece of machinery in the universe", "the greatest unexplored territory in the world", "a biological supercomputer" and much more (1997: 25).

All those names are due to the awesome function of the brain and it is indeed because of brains, human being differs from other creatures on this earth. "The empires of the future will be the empires of the mind", said Sir Winston Churchill as quoted by Rose and J. Nicholl (1997 : 1) indicating the crucial role of the brain in modern life and the era of globalization.

The statement above is also boosted by Brian Tracy, the author of Maximum Achievement as quoted by Rose & Ncholl as saying : "Today, the greatest single source of wealth is between your ears. Today, wealth is between your ears. Today, wealth is contained in brainpower, not brute power." (1997: 19). Now physically, our brain can be divided into three kinds of brain: reptilian, mammalian, and the thinking brain

The Reptilian Brain

According to Rose and J. Nicholl this part of the brain controls many basic functions including: breathing, heart rate and instincts such as the fight or flight response when danger threatens. This brain also controls other primitive instincts – our sense of territory, for example, which is why we may feel angry, threatened or uncomfortable when some one moves too close to us.

It also indicates that anger is difficult to handle because it is often a result either of feeling threatened or of someone trying to take away something you think is yours, for example, an invasion of your territory." (1997: 28)

The Mammalian Brain

The limbic system is our emotional controller that helps to maintain "homeostasis, a stable environment in the body". (1997: 28).

According to Rose and J. Nicholl, this system controls our hormones, thirst, hunger, sexuality, pleasure centers, metabolism, immune function and an important part of our long – term memory". (1997: 29)

Those who are obsessed with goals and ideals and emotion are those whose hypothalamus and amygdale work too much. Four important things which are controlled by the limbic system or mammalian brain are emotion, sex, health and memory (1997:29). It is, therefore, appropriate to say that those who are easily prone to those four are close to reptilian attitudes as illustrated by the persons who are frequently sensitive to prejudice.

In public atmosphere it is not rare that those with high social position are still opt for fighting or physical contact abuses to achieve their goals as illustrated by the judicial or legislature's brawl on public media e.g. : television, parliamentary brawls among legislatures. The phenomena also show that women's behaviors are more shaped by limbic. This is true as women are more

prone to emotional, sensitivities and explosions (for example women tend to cry more frequently than men).

The Thinking Brain

This brain is extraordinary and the seat of intelligence, distinguishing human from animals.

The tasks of this brain are: "seeing, hearing, creating, thinking, and talking, in fact, all of the higher intelligences." (1997: 32).

"As human being, we have to make use of this part of the brain maximum so that our judgment and way of thinking can be unique and powerful. It is based on this frame of thinking David J. Schwartz has written his popular book entitled, The Magic of Thinking B I G in which he says in his preface : "The magic of thinking big comes from the highest pedigree sources, the very finest and biggest thinking minds yet to live on planet Earth …" (1987: 11).

Schwartz has suggested that we think only the biggest and most important things in this world, not triviality; furthermore, he suggested: "Case history after case history proved that the size of bank accounts, the size of happiness accounts and the size of one's general satisfaction account is dependent on the size of one's thinking." (1987: 10)

This is an indication that one's thinking brain should be associated only with big problems. In other words, when one is thinking big problems, his necrotic is mostly employed but when his thinking is associated with trivialities or anger, his limbic brain is mostly employed and even it turns into reptilian brain. This is true as Lesley Hart puts it, "The human brain is down – shifted to the more primitive areas of the brain. We revert to instinctual behavior rather than use rational judgment." (1997: 30).

Your Two Brains: the left brain and right brain hemispheres.

According to Rose and J. Nicholl, the left brain specializes in what is commonly labeled as "academic" aspects of learning – language and mathematical processes, logical thoughts, sequences and analysis.

The right brain is principally concerned with "creative" activities utilizing rhyme, rhythm, music, visual impressions, color for analogies and patterns. (1997: 33)

This is certainly in line with Sperry's initial findings as quoted by Tony Buzan as saying: The right hemisphere appeared to be dominant in the following intellectual areas: rhythm, spatial awareness, gestalt (wholeness), imagination, daydreaming, color and dimension. The left hemisphere appeared dominant in a different but equally powerful range of mental skills: words, logic, numbers, sequence, linearity, analysis and lists." (1993: 32)

Brain Analysis in Language Learning

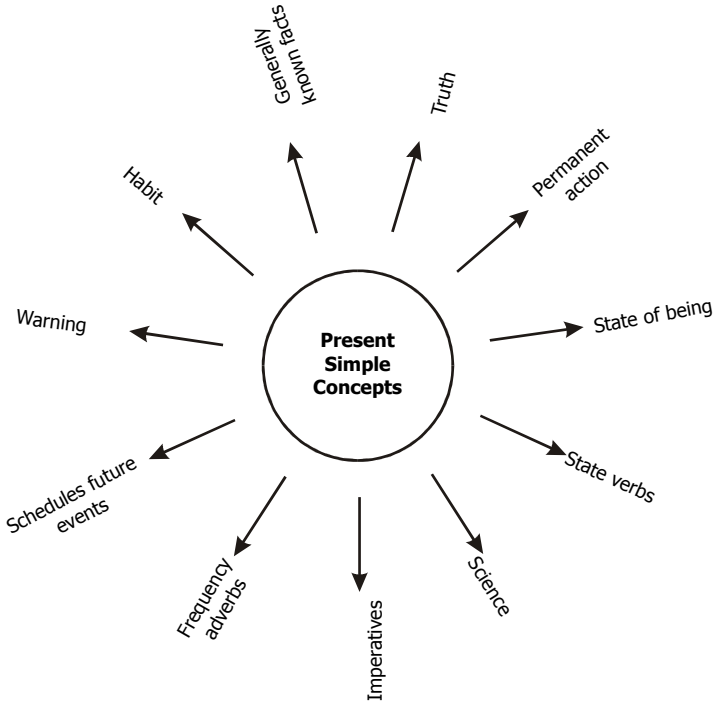
Understanding human brains and their structural parts are significant for improving learning strategy. This is what suggested by Rose and J. Nicholl :"An

appreciation of "inner space" and the way in which the brain works is fundamental to understanding the learning process : Why lifelong learning from cradle to grave is so important and how it can be dramatically improved for everyone." (1997: 27)

By understanding the brain structure, it is highly likely that a professional teacher may be able to develop the (language) teaching strategy.

Since one brain cell may develop into 20,000 (twenty million branches) called dendrites, the first priority on teaching strategy should fall on mini – mind mapping, as proposed by Tony Buzan: "The Mini – Mind Map is the embryonic form of a Mind Map. 'Mini' though this Mind Map is, its implications are gigantic" (1993: 64)

This strategy can also, in no doubt, be applied on the teaching of language. In English, for instance, the concept of present simple has about nine to ten concepts. Hence, using the above strategy, an English teacher can help his/her students explain the concepts as follows:



Why Mind Map Strategy?

Some reasons have been launched by Tony Buzan for not using the standard notes due to the disadvantages as follows:

1. The standard notes obscure the key words.
   Important ideas are conveyed by key words which are usually nouns or strong verbs. In standard notes, these key words often appear on different pages, obscured by the mass of less important words, preventing the brain from making appropriate associations.
2. They make it difficult to remember.
   Monotonous color notes are visually boring and difficult to remember. Standard notes often take the form of endless similar-looking lists. This problem puts the brain in semi-hypnotic trance (1993: 49), making it almost impossible to remember their content.
3. Standard note-making/taking systems waste time at all stages: by encouraging unnecessary noting, by requiring the reading unnecessary notes, by requiring the re-reading of unnecessary notes, by requiring the searching for key words.
4. Standard notes fail to stimulate the brain creatively.
   Naturally, the linear presentation of standard notes prevents the brain from making association, thus counteracting creativity and memory.
   Following are the consequences for our brains due to the above disadvantages based on Buzan's:

1. We lose our powers of concentration, as a result of the brain's understandable rebellion against mistreatment.
2. We acquire the time-consuming habit of making notes on notes in an attempt to discover the ever more exclusive essence of whatever we are studying.
3. We experience loss of confidence in our mental abilities and in ourselves.
4. We lose the love of learning so evident in young children and those who have been fortunate enough to learn how to learn.
5. We suffer from boredom and frustration.
6. The harder we work, the less we progress because we are unwittingly working against ourselves." (1993:50)

Considering these disadvantages of conventional standard notes, Tony Buzan proposed the new innovation on note taking and note making to be used today to keep a breast of the rapid world development. This innovation equals the Radiant Thinking. Following is the quotation taken from Buzan's.

The Mind Map is an expression of Radiant Thinking and is, therefore, a natural function of the human mind. It is a powerful graphic technique which provides a universal key to unlocking the potential of the brain. The Mind Map can be applied to every aspect of life where improved learning and cleaner thinking will enhance human performance.

The Mind Map, according to Buzan, has four essential characteristics:

1. The subject attention is crystallized in a central image.
2. The main themes of the subject radiate from the central image as branches.
3. Branches comprise a key image or key word printed on an associated line. Topics of lesser importance are also represented as branches attached to higher level branches.
4. The branches form a connected nodal structure: (1993:51)

Considering all these benefits, it is a high time teachers applied this strategy on enhancing their capability in improving the quality of their job, that is, teaching all elements of language being learned.

CONCLUSIONS

Since linguistic intelligence tops other intelligences in Gardner's paradigm concepts, the teaching of English must be updated all the time. One innovation that an expert proposes is teaching language through The Mind Map strategy that is an expression of Radiant Thinking and is a natural function of the human mind. It is a powerful graphic technique which provides a universal key to unlocking the potential of the brain.

The Mind Map strategy has been superior considering the fact that standard notes have some disadvantages, such as: obscuring the keywords and wasting time. All these can cause our brain: to lose power of concentration, to experience loss of confidence, to lose the love of learning, to suffer from boredom and to get harder to work but less to progress. Despite the advantages, of course as a new strategy, weaknesses are looming, one of these, for instance, is it is not yet fully recognized by public.

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